

Cable - Low Voltage Power

Cable Description: ABC 3X70 AL (P) + 1X70AA (N) XLPE 600/1000 V WAPDA DDS-82:2007 : Lay

Up

Design and Construction Data

Reference Manufacturing Standards	WAPDA DDS-82:2007	
Max. Permissible Continuous Conductor Temp	°C	90
Max. Conductor Short Circuit Temp for 5 Seconds	°C	250
Rated Voltage ' Uo / U '	V	600/1000
Number of Phase Conductors x Cross-Section	mm ²	3 x 70
Phase Conductor Material & Shape	Aluminum & Stranded Class 2 Circular Non Compact Round Shape	
Number of Neutral Conductors x Cross-Section	mm ²	1 x 70
Neutral Conductor Material & Shape	Aluminum Alloy & Stranded Class 2 Circular Non Compact Round Shape	
Insulation Material	XLPE	
Phase Insulation Nominal Thickness	mm	1.40
Neutral Insulation Nominal Thickness	mm	1.40
Colour of Insulation	Black	
Approximate Cable Overall Diameter	mm	32.67
Approximate Cable Weight	Kg/km	1021
Cable Length	Meter	500 ± 5%

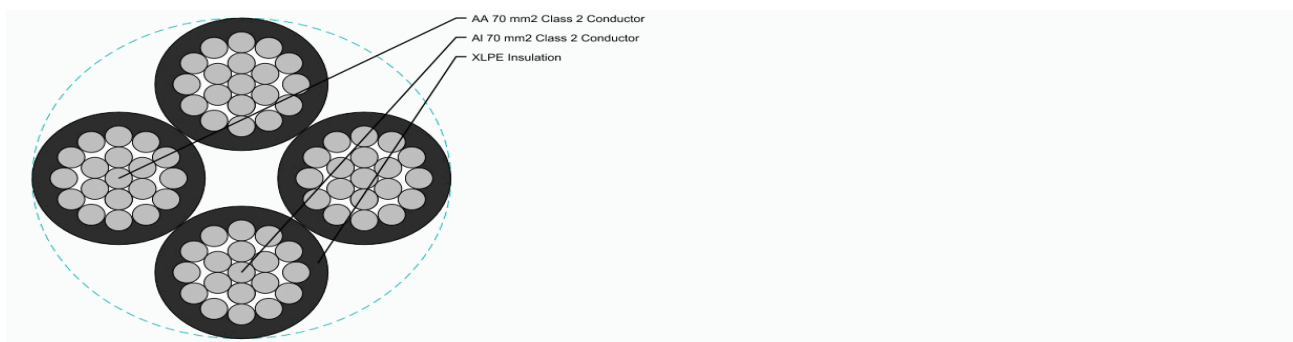
Electrical Data

Max. Phase Conductor DC resistance @ 20 °C	ohm/km	0.443
Max. Neutral Conductor DC resistance @ 20 °C	ohm/km	0.510
High Voltage Test at 3.5 kV for 5 min	AC	No Breakdown Shall Occur
Min. Insulation Resistance Value @ 15 °C	M.Ω.Km	Calculation Formula= 15240 log10 D/d
Max Conductor Short Circuit Current @ 1 Second	kA	6.58
Current Carrying Capacity		
Laid in Free air @ 30 °C Ambient Temperature	Amp	213
Minimum Bending Radius	mm	15 D
The Cable shall meet all Test requirements	WAPDA DDS-82:2007	

Cable Marking

(PHASE 1, 2, 3 & NEUTRAL) ABC CABLE 3X70MM SQ AL + 1X70MM SQ AL. ALLOY XLPE 600/1000 V AS PER WAPDA FAST CABLES LTD Y.O.M

Cable Drawing



ABC 3X70 AL (P) + 1X70AA (N) XLPE 600/1000 V WAPDA DDS-82:2007 : Lay Up	Approx. Diameter	
Phase Stranded Aluminum Conductor with Round shape	mm	10.70
Neutral Stranded Aluminum Alloy Conductor with Round shape	mm	10.70
XLpe Insulated	mm	13.50
Laid up cores diameter	mm	32.67